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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/816,010	03/22/2001	Dean R.E. Long	SUN1P279/P4888	5180

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EXAMINER

RIMELL, SAMUEL G

ART UNIT	PAPER NUMBER
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2165

DATE MAILED: 06/23/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/816,010

Applicant(s)

LONG, DEAN R.E.

Examiner

Sam Rimell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-7, 11-16, 21-25 is/are allowed.
- 6) ☒ Claim(s) 8-10 and 17-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.


SAM RIMELL
PRIMARY EXAMINER

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date ____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

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The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 8-10 and 17-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Klots et al. (U.S. Patent 6,144,983).

Claim 8: FIG. 3 illustrates a plurality of data rows, which are a plurality address locations in a memory. A thread is the process performed on those rows (col. 11, line 63) that leads to a request for a lock. The objects are what ever data is contained in the rows. The locks are accessible to the objects by reason that the locks are applied to hash buckets associated with the objects. The data structure is the structure of FIG. 3 associates locked (or unlocked) hash buckets with rows. The thread described at col. 11, line 63 is the same thread (first process) identified by the lock manager at col. 12, lines 46-54 as holding a conflicting lock. As a result of the determination that this same thread holds the conflicting lock, the lock is released by the lock manager (col. 12, line 51).

Claim 9: The hashing mechanism is the hash function that creates hash values (col. 11, lines 64-67).

Claim 10: The resulting hash values that derive from the hash function are address locations.

Claim 17: FIG. 3 illustrates a plurality of index values (rows) and a plurality of lock identifiers (buckets 310, 320, 330). The lock identifiers (buckets) are associated with the index values (rows) in FIG. 3. The locks are held by threads, which are the "process one", "process

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two”, “process three” and “process four”. The thread described at col. 11, line 63 is the same thread (first process) identified by the lock manager as holding a conflicting lock. As a result of the determination that this same thread holds a conflicting lock, the lock is released (col. 12, line 51).

Claim 18: FIG. 3 illustrates a plurality of lock identifiers (buckets). At least one lock identifier is associated with a plurality of rows (each bucket is associated with plural rows in FIG. 3).

Claim 19: The data structure is accessed by a thread (a process) using a hash value resulting from a hash function.

Claim 20: The index values (rows) are also the resulting hash values from the hash function. In other words, operating the hash function produces a hash value that corresponds to one of the rows.

Claims 1-7, 11-16 and 21-25 are allowed.

Remarks

Applicant's arguments and amendments have been considered.

Applicant's arguments and amendments are effective in overcoming the rejections of claims 1-7, 11-16, and 21-25 and these claims are now indicated as allowed. Claims 8-10 and 17-20 remain rejected in view of Klots et al.

In particular, the amendments to independent claim 8 and independent claim 17 do not distinguish from the lock de-escalation process which is followed in the Klots et al. patent. These claims in particular appear to remain broad enough to encompass the lock de-escalation described by Klots et al. Claims 8 and 17 have only been amended to require that an object

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reach a condition where it is not locked by one particular locking thread, which would correlate to the release of the course grain lock while a fine grain lock remains, as described by Klots et al. at col. 12, line 51. These claims do not appear to require the release of all locking constructs or associations, and thus still reads on Klots et al.

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication should be directed to Sam Rimell at telephone number (571) 272-4084.



Sam Rimell
Primary Examiner
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